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## **Uravan Signs \$22 Million Uranium Exploration Agreement**

Uravan Minerals Inc. (“Uravan”) and Cameco Corporation (“Cameco”) (TSX: CCO) have signed a “Term Sheet Memorandum” agreement whereby Uravan granted Cameco the exclusive option (“Option”) to earn an aggregate 70% interest in Uravan’s 100% owned Halliday and Stewardson uranium projects (the “Mineral Properties”), Athabasca Basin<sup>1</sup>, Northern Saskatchewan [\[map link\]](#) by Cameco funding a cumulative twenty-two million dollars (\$22,000,000) in exploration expenditures.

The agreement consists of two Options: (1) the first option grants Cameco the exclusive right to earn a 51% interest in the Mineral Properties by funding seven million dollars (\$7,000,000) in exploration expenditures over four years and (2) a second option grants Cameco the exclusive right to earn an additional 19% in the Mineral Properties by funding an additional fifteen million dollars (\$15,000,000) in exploration expenditures. Upon Cameco earning either a 51% or 70% interest in the Mineral Properties, Cameco and Uravan (collectively the “Parties”) shall enter into a joint venture agreement to form a joint venture in relation to the Mineral Properties, with the Parties funding their pro-rata share of future exploration expenditures. Uravan shall be the operator for the first four years of the Option, after which Cameco may elect to become the operator.

The Halliday property consists of a single mineral disposition (S-107299) totaling 2,169 hectares, located approximately 18 kilometers northwest of McArthur River uranium mine in the eastern Athabasca Basin [\[map link\]](#). Historically, six (6) widely-spaced diamond drill holes were completed on the property amounting to 5,176 metres drilled with drill depths averaging about 850 meters. This reconnaissance drilling targeted three coincident EM conductors within an east-west oriented magnetic low. Based on core analysis and interpretation, the conductive zones coincide with an east-west trending graphite-bearing metasedimentary unit and structural zone. Core analysis identified high boron concentrations within basement samples, strong illite clay alteration in the Athabasca sandstone above the unconformity and anomalous uranium mineralization occurring at the unconformity in drill hole EL-09 assaying 0.12% U3O8 (<1.0 meters).

The Stewardson property consists of five (5) contiguous mineral dispositions (S-107738, S-108181 to S-108184 inclusive) totaling 21,349 hectares, located approximately 20 kilometers north of Cameco’s Centennial uranium deposit in the south-central portion of the Athabasca Basin. The Stewardson property overlies the northeast-southwest trending Dufferin fault. Historical electromagnetic (EM) and magnetic surveys over the property indicate a broad magnetic low hosting several conductors and interpreted faults sub-parallel to the Dufferin Lake fault on the western portion of the property, transitioning to a magnetic high on the eastern side of the Dufferin Lake fault. In 2004 one diamond drill hole (VR-01) was completed, intersecting the unconformity at 1,135 meters. VR-01 targeted a broad boron anomaly defined by boulder and outcrop sampling completed in 1995. Although no significant uranium mineralization was encountered in VR-01, the drill hole intersected a wide interval of illite clay alteration in sandstone above the unconformity and 15 meters of chlorite clay alteration directly above the unconformity. The illite and coincident chlorite clay alteration in the sandstone above the unconformity is indicative of favourable hydrothermal activity in the area, a key ingredient necessary for uranium mineralization.

In the summer of 2011, Uravan completed multifaceted surface geochemical sampling programs on the Halliday and Stewardson projects [\[Press Release Link\]](#). These surface programs capitalized on new surface geochemical technologies developed from a geochemical remote sensing study conducted over the Cigar West Uranium deposit (Cigar Lake Study)<sup>2</sup> for the detection of buried unconformity-related uranium deposits in under-explored areas in the Athabasca Basin.

Data analysis and interpretation of the surface geochemical data from the Halliday project identified an east-west oriented highly anomalous geochemical signature that is coincident with an EM (electromagnetic) geophysical conductor and magnetic low corridor [[map link](#)]. The east-west geochemical signatures consist of anomalous radiogenic Pb isotope values occurring in the clay minerals separated from the soil media and in tree-cores. These coincident radiogenic Pb anomalies also correlate strongly with other anomalous uranium pathfinder elements occurring in the same media.

Based on positive results from the Halliday surface geochemical program, a five hole diamond drill program is planned and anticipated to commence in July 2012. In preparation for finalizing drill targets, additional ground geophysics and structural mapping is being considered to be completed over the anomalous east-west geochemical trend and EM conductor. More details on these surveys and the subsequent drill program will be announced in future press releases.

Data analysis and interpretation of the surface geochemical data from the Stewardson project highlighted the south-central portion of the property as having favourable correlation and clustering of anomalous radiogenic Pb isotope values ( $^{207}\text{Pb}/^{206}\text{Pb}$  isotopic ratios) in soil and in tree core samples [[map link](#)]. Multiple correlations between anomalous radiogenic Pb isotopic signatures and other element geochemical enrichment with interpreted structural trends suggest preferential element migration from depth through high permeability fluid conduits and may serve as important indicators to structurally controlled subsurface mineralization. In 2012, an airborne EM survey is being considered to be flown over the south-central claim blocks to better defined conductive trends that are supported by key surface geochemical data.

Uravan is looking forward to working with Cameco's exploration group. Uravan is committed to bring the highest level of technical knowledge and uranium exploration experience into our exploration programs on the Halliday and Stewardson projects.

Dr. Colin Dunn, P. Geo., technical advisor for Uravan, is the Qualified Person for the purposes of NI 43-101 with respect to the technical information in this press release.

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<sup>1</sup>The Athabasca Basin is an ancient (Paleoproterozoic) sandstone basin located in northern Saskatchewan, Canada. The Athabasca Basin hosts high-grade unconformity-type uranium deposits that account for about 28 percent of the world's primary uranium production. These unconformity-type uranium deposits occur in sandstones at the basement-sandstone unconformity contact (sandstone-hosted mineralization) and within the underlying structurally disrupted crystalline basement (basement-hosted mineralization). The ore grades are high, typically grading 5% to 20%  $\text{U}_3\text{O}_8$ .

<sup>2</sup>The Cigar West Study was a collaborative applied research program conducted by Uravan and QFIR (Queen's Facility for Isotope Research) in 2009 over a known high-grade uranium deposit in the Athabasca Basin. The study was designed to develop new surface geochemical techniques that can better identify bedrock sources of uranium mineralization at depth. This research clearly identified distinctive elements and isotopic compositions that have been mobilized from the deposit (geosphere) to the surface media (plants and soils) from depths >450 meters. The Cigar Lake deposit is on the Waterbury/Cigar uranium property; a joint venture partnership between Cameco Corporation, AREVA, Idemitsu Kosan Co. Ltd., and Tokyo Electric Power Co. [TEPCO]) located in the Athabasca Basin, Saskatchewan. Uravan thanks both AREVA and Cameco for their collaboration and gracious support for the Cigar West Study; and the support provided by the Cigar Lake facility during our field operations.



<sup>3</sup>The Queen's Facility for Isotope Research (QFIR) at Queen's University, Ontario is a state-of-the-art research facility, comprising a group of highly experienced research geochemists. The QFIR lab contains some of the most technologically advanced analytical equipment in Canada. Under the direction of Dr. Kurt Kyser, the QFIR research team is working collaboratively with Uravan's technical group to develop new exploration technologies using applied research.



*Dr. Colin Dunn, an independent specialist in biogeochemistry, is working closely with Uravan's technical group and QFIR to advance the interpretation of biogeochemical results. Dr. Kurt Kyser and Dr. Colin Dunn are key technical advisors for Uravan.*

*Uravan is a Calgary Alberta based diversified mineral exploration company that utilizes applied research to develop new innovative exploration technologies to identify buried uranium, rare earth elements (REE) and nickel-copper-platinum group element (Ni-Cu-PGE) deposits in under-explored areas. Our exploration focus in uranium is for potential high-grade unconformity-related uranium deposits in the Athabasca and Thelon Basins in Canada and other basin environments globally. Uravan is expanding its acquisition efforts toward REE geological domains in North America and specific areas globally. The REE and uranium mineralization occur in related geological environments thereby complementing Uravan's uranium exploration efforts with a strategy to add diversification to its portfolio. Further, Uravan is pursuing the exploration of its advanced- stage Rottenstone Ni-Cu-PGE project supported by the development of new drill targets defined by recent geophysical re-interpretation. Uravan is a publicly listed company on the TSX Venture Exchange under the trading symbol UVN. All of the mineral properties Uravan owns are considered in the exploration stage of development.*

*This press release may contain forward looking statements including those describing Uravan's future plans and the expectations of management that a stated result or condition will occur. Any statement addressing future events or conditions necessarily involves inherent risk and uncertainty. Actual results can differ materially from those anticipated by management at the time of writing due to many factors, the majority of which are beyond the control of Uravan and its management. In particular, this news release contains forward-looking statements pertaining, directly or indirectly, to Uravan's plans, the entering into of a joint venture agreement in respect of the Mineral Properties, the timing and completion of exploration expenditures and planned survey, exploration and drilling activities. Readers are cautioned that the foregoing list of risk factors should not be construed as exhaustive. These statements speak only as of the date of this release or as of the date specified in the documents accompanying this release, as the case may be. The Corporation undertakes no obligation to publicly update or revise any forward-looking statements except as expressly required by applicable securities laws.*

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